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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,564	03/28/2001	Edward O. Clapper	10559-360001 / P10037	9279

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EXAMINER

MWANYOHA, SADIKI P

ART UNIT	PAPER NUMBER
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2642

DATE MAILED: 10/02/2003 *5*

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,564

Applicant(s)

CLAPPER ET AL.

Examiner

Sadiki Mwanyoha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3-28-01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because Fig. 1 has a possible typographical error "Micrcontroller". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: all labels mentioned for Figs. 1, 2, 3a, 3b, 4, 5, 6. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. Additionally, the drawings are objected to because Figs. 3a and 3b are not mentioned in the description and Fig. 3, which is mentioned in the description, is missing. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent US005991634A to Hui et al.

Regarding claim 1, Hui et al. discloses a “plug and play telephone system”. The invention of Hui et al. relates to a key telephone system comprising a plurality of stations (15-1) that are each coupled to a common telephone line (1’) [see Hui et al. col. 2, line 5; also Fig. 1]. Each station adaptively determines its own allocation of resources. During operation each station requests the appropriate resources from its peers [see Hui et al. col. 2, line 10]. According to the invention of Hui et al., a telephone station sends a message over an RF control channel requesting a resource (i.e. transmitting a request for a call feature) [see Hui et al. col. 7, line 43]. The RF control channel spans wire pair (1’) (i.e. over a phone line) [see Hui et al. col. 3, line 3]. If the endpoint (i.e. extensions) receiving the request chooses to deny the resource request (i.e. processing the request), it responds by transmitting a “denial message” (i.e. instructions). If, on the other hand, the endpoint chooses to confirm the resource request (i.e. processing the request), it responds by refraining from transmitting, thus affecting an empty, or idle, message frame (i.e. instructions). The response messages are transmitted over the wire pair

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(1') (i.e. over the phone lines). That is, the invention of Hui et al. also reads on processing the request; and transmitting instructions in response the request to extensions over the phone lines.

Regarding claim 2, further note that according to the invention of Hui et al., each endpoint is assigned its own access slot. An endpoint that has a lower message access slot number (i.e. setting a first phone as a master) has higher priority for sending a message than endpoints with higher message access slot numbers (i.e. and any remaining phones as slaves) [see Hui et al. col. 6, line 15].

Regarding claim 3, further note that according to the invention of Hui et al., the RF control channel used for requesting a resource over wire pair (1'), is accomplished with a fixed, frequency modulated "control channel" operating between 270 KHz and 400KHz [see Hui et al. col. 4, line 6]. Referring to Hui et al. Fig. 6, the voice channels are placed in different band (between 400 KHz and 1.4 MHz) than the "control channel" (i.e. transmitting the requests for a call feature at a frequency not used for voice or voice-over-data communications).

Regarding claim 4, further note that the invention of Hui et al. relies upon an MFS pulse for maintaining synchronization between endpoints (i.e. extensions) [see Hui et al. col. 7, line 5]. In the event that no MFS pulse occurs (i.e. inactivity) within the nominal expected time (i.e. after a predetermined time), corrective action to restore (i.e. resetting the phone system) the message frames is needed.

Regarding claim 8, for reasons already given, the invention of Hui et al. reads on submitting a request for a call feature from a first phone extension as well as transmitting instructions regarding call features over the local phone lines at a frequency not used for voice or voice-over-data communications. Further note that according to the invention of Hui et al., each

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station (100) (i.e. first phone extension) comprises a microprocessor (235) (i.e. local controller) as well as a keypad (not shown in figure), inherently, used for initiating a request for a call resource (i.e. submitting a request for a call feature) [see Hui et al. col. 3, line 51].

Regarding claim 9, recall that the invention of Hui et al. distinguishes between high priority endpoints (i.e. designating the first phone as a master) and low priority endpoints (i.e. and any remaining phones as slaves).

6. Claims 14-22 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4,757,496 to Bartholet et al.

Regarding claim 14, Bartholet et al. discloses a “distributed telephone system”. Referring to Bartholet et al. Fig. 1, telephones (52) (i.e. plurality of extensions) are connected to the system via control units (54) (i.e. controller), which are responsible for controlling the switching and routing of communication between a telephone and other telephones of the system (i.e. from a plurality of phone extensions). Both conversation and control signals are communicated via coaxial cable (56) (i.e. over a phone line) via a set of narrow bandwidth channels [see Bartholet et al. col. 2, line 60]. In response to a request to initiate telephonic communications (i.e. receives requests for call features), the control unit (54) comprises a microcomputer (15) that selects one of the channels in accordance with a pre-established protocol (i.e. the controller processes the requests) [see Bartholet et al. col. 3, line 29]. Furthermore, the microcomputer (15) also transmits a control word (i.e. transmits instructions) to all control units (54) of the system (i.e. to the phone extensions based on the requests). Moreover, the control unit (54) comprises two transmitters and two receivers. One of the

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transmitters and one of the receivers (i.e. a first transceiver) are used for transmission and reception of control signals (i.e. provides communications) generated by the control units (54) (i.e. between the controller and the phone extensions) for the switching and routing of the telephone signals on the narrow bandwidth channels [see Bartholet et al. col. 3, line 15].

Regarding claim 15, further note that according to the invention of Bartholet et al., the second transmitter and second receiver (i.e. a second transceiver) are used for the transmission and reception of narrow band telephone signals for voice and data communications (i.e. used for voice communications) [see Bartholet et al. col. 3, line 11].

Regarding claim 16, further note in reference to Bartholet et al. Fig. 7, that the first transmitter and first receiver (i.e. the first transceiver) disclosed by Bartholet et al. uses the control data channel, which comprises a different frequency band (i.e. operates at a different frequency) than the voice channel used by the second transmitter and second receiver (i.e. than the second transceiver) disclosed by Bartholet et al.

Regarding claims 17-20, further note that the invention of Bartholet et al. provides full PBX functions (i.e. call features) including call waiting, conference calling, intercom (i.e. paging), and hold (i.e. call hold), respectively [see Bartholet et al. col. 11, line 60].

Regarding claim 21, further note that each control unit (54) can be employed (i.e. call features are accessed through) with a telephone handset (i.e. phone handsets) [see Bartholet et al. col. 3, line 5].

Regarding claim 22, further note that each control unit (54) shown in Bartholet et al. Fig. 1 is assigned a nominal "home line" preferably corresponding to an extension number (i.e. connected to at least one phone extension) [see Bartholet et al. col. 12, line 3]. Furthermore, the

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control unit (54) comprises a keyboard or keypad (14) (i.e. control center) used by the sender party (i.e. user) to enter the number for the target party, which is to be called (i.e. provides a user interface to access the call features) [see Bartholet et al. col. 5, line 66].

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hui et al. in view of US patent 4,554,411 to Armstrong.

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Regarding claim 5, as shown above, Hui et. al. does teach the method of claim 2.

However, Hui et al. does not teach paging a slave phone from the master phone.

Nevertheless, Armstrong discloses an "intercom system". According to the invention of Armstrong, anyone of the master control station (100) (i.e. from the master phone), the inside stations (106,108,110,112,114) (i.e. slave phone), and outside stations (120,122,124) (i.e. slave phone) may be used to page all the other stations (i.e. slave phone) [see Armstrong col. 3, line 14]. That is, the invention of Hui et al. discloses a master control station (i.e. master phone) paging an inside remote control station (112) (i.e. slave phone), for example (i.e. paging a slave phone from the master phone).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the method of Hui et al. to include the high priority (i.e. from the master phone) being operable for paging a lower priority (i.e. slave phone) as taught by Armstrong, because paging is a standard phone feature in shared line environments.

Regarding claim 13, as shown above, Hui et al. does teach the method of claim 9.

However, Hui et al. does not teach paging a slave phone from the master phone.

Nevertheless, it would have been obvious for the above reasons.

10. Claims 6, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hui et. al. in view of US patent US005937058A to Bleile et al.

Regarding claim 6, as shown above, Hui et al. does teach the method of claim 2.

However, Hui et al. does not teach conferencing a slave phone with the master phone.

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Nevertheless, Bleile et al. discloses “coordinating telephones or adjuncts on the same loop”. The invention of Bleile et al. relates to Spontaneous Call Waiting InDication (SCWID). According to the invention of Bleile et al., a flash master (i.e. the master phone) may be connected (i.e. conferencing) with a flash slave (i.e. a slave phone) in response to a call waiting indication transmitted by the flash slave [see Bleile et al. col. 6, line 50].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the method of Hui et al. by allowing a low priority endpoint (i.e. slave phone) to be conferenced with a high priority endpoint (i.e. master phone), as taught by Bleile, because conferencing is standard phone feature in shared line environments.

Regarding claims 10 and 11, as shown above, Hui et al. teaches the method of claim 8. Furthermore, recall that Hui et al. in view of Bleile et al. teach transmitting a call waiting indication from the flash slave to the flash master (i.e. transmitting a call waiting request to the master phone if any slave phone is activated). Moreover, in response to the call waiting indication, the flash master is connected to the flash slave (i.e. conferencing a slave phone with the master phone in response to the call waiting request).

11. Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hui et al. in view of US patent 4,899,381 to Lee.

Regarding claim 7, as shown above, Hui et al. does teach the method of claim 1. However, Hui et al. does not teach placing one of the phone lines on hold.

Nevertheless, Lee discloses a “single-line telephone hold circuit”. The invention of Hui et al. relates to an interface device for use in a residential telephone subscriber line to place a

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temporary hold on a subscriber's telephone line. The invention of Lee comprises a master unit (i.e. one of the phone lines) in room A, and two remote units in rooms B and C. According to the invention of Lee, the master unit may activate a hold if the subscriber wishes to leave room A (i.e. placing one of the phone lines on hold). Furthermore, if the hold was activated from the master unit, the subscriber may subsequently remove the hold from any of the locations A, B or C [see Lee col. 4, line 31].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Hui et al. such that a high priority endpoint (i.e. master phone) could be placed on hold, as taught by Lee, because such a feature provides user mobility by allowing a user stationed at a high priority endpoint, for example, to move to a new location containing a low priority endpoint, while still maintaining the current call.

Regarding claim 12, further note that the master unit taught by Hui et al. in view of Lee reads on master phone (i.e. placing the master phone on hold).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Benning et al. US patent 4,459,434 discloses a "home telephone exchange".
- b. Benning et al. US patent 4,538,031 discloses a "home communications and control system".
- c. Coker US patent US005444772A discloses a "telephone lockout device".
- d. Nakamura et al. US patent 3,705,412 discloses a "duplex interphone".
- e. Grantland et al. US patent 4,435,622 discloses a "latching relay hold circuit for a telephone instrument".
- f. Izumi US patent US005361299A discloses an "exchange apparatus enclosing a plurality of extension terminals and connecting an extension terminal to a line wire".
- g. Benson US patent US005978469A discloses an "apparatus for telephone extension control".
- h. Liu US patent US005566233A discloses a "communication controlling apparatus for a single-line telephone with extensions thereto".
- i. Taniguchi US patent 5,031,210 discloses a "telephone apparatus".
- j. Druckman et al. US patent US005283825A discloses a "telephone adaptor for telephone sets".
- k. Shimanuki US patent 4,958,370 discloses a "control system for a plurality of telephone sets".
- l. Schneider et al. US patent 4,401,847 discloses a "telephone communication system".

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m. Wahi et al. US patent 4,899,372 discloses a "multi use telephone extension control circuit and device providing lockout for privacy".

n. Howe et al. US patent 4,809,317 discloses a "telephone line exclusion device".

o. Lin et al. US patent US005594788A discloses a "telephone system and interface device".

p. Nowicki US patent US005179588A discloses an "improved page party system".


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sadiki Mwanyoha whose telephone number is 703-305-3417.

The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on 703-305-4731. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

spm


AHMAD MATAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Application/Control Number: 09/820,564

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